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COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY STATE AIR POLLUTION CONTROL BOARD

IN RE: BOARD MEETING

HEARD BEFORE: RICHARD D. LANGFORD

CHAIR OF THE STATE AIR POLLUTION CONTROL BOARD

DECEMBER 19, 2018

POCAHONTAS BUILDING

900 EAST MAIN STREET

RICHMOND, VIRGINIA

10:07 A.M.

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    APPEARANCES:
        Richard D. Langford, Presiding
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        Chair of the State Air Pollution Control Board
3
        Matthew Gooch, Esq.
Office of the Attorney General
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        Board counsel
5
6
7
    BOARD MEMBERS:
        Ignacia Moreno
8
9
        Nicole Rovner
        William H. Ferguson
10
11
    DEO STAFF:
12
        David Paylor, Director
13
        Cindy Berndt
14
15
        Debra Harris
16
        Michael Dowd
        Patrick Corbett
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1	(The Air Pollution Control Board meeting
2	commenced at 10:07 a.m. A quorum was present and the
3	taking of testimony commenced as follows:)
4	
5	MR. LANGFORD: I'm calling this
6	meeting of the State Air Pollution Control
7	Board to order. Before we begin, I'd like
8	to ask everyone to silence his or her cell
9	phone.
10	I thank you for that. Now,
11	I'd like the Board members sitting on the
12	stage here to introduce themselves,
13	beginning on my left.
14	
15	MR. FERGUSON: Good morning. My
16	name is William H. Ferguson. I'm from
17	Newport News, Virginia.
18	
19	MS. ROVNER: I'm Nikki Rovner. I
20	live here in the City of Richmond.
21	
22	MR. LANGFORD: My name is Richard
23	Langford. I'm from Blacksburg.
24	
25	MS. MORENO: Good morning. I'm

Ignacia Moreno from Herndon.

MR. LANGFORD: Thank you. We have a quorum. There are three members of the Board not joining us today. Mr. Hoagland who has a conflict of interest in the action before the Board and two newly sworn in members of the Board, Ms. Kapur and Ms. Bush.

Also on stage today is David
Paylor, the Director of the Department of
Environmental Quality, and the Board's legal
counsel, Matthew Gooch, who's an Assistant
Attorney General.

The only item on today's agenda is the Minor New Source Review Permit for the Atlantic Coast Pipeline, LLC, Buckingham Compressor Station, registration number 21599.

Before we begin, I'd like to remind everyone that the Board's meeting on November 8 and 9, the Board received detail presentations from the staff on the development and technical aspects of the draft permit. The public comments received

during the permit comment period that ran from August 8 through September 21, the agency response to those comments and staff amendments to the draft minor new source review permit.

In addition, the Board heard comments directly from 80 members of the public that had previously commented and a brief presentation from the applicant.

After the presentations and public comment, the Board discussed the draft permit and asked numerous questions of staff, but deferred any action on the permit until today's meeting.

At this time, I believe the Board would like to go into a closed meeting. Do I have a motion to go into a closed meeting?

(At this time, members of the public in the gallery began shouting. The Board members left the room at 10:08 a.m., and then returned when the gallery became quiet. The taking of testimony resumed as follows:)

1	MR. LANGFORD: Ms. Moreno.
2	
3	MS. MORENO: Mr. Chairman, I move
4	that the Board go into a closed meeting,
5	pursuant to Section 2.2-3711 A7 of the Code
6	of Virginia, for consultation with legal
7	counsel and briefings by staff members
8	pertaining to actual or probable litigation.
9	And Section 2.2-3711 A8,
10	consultation with legal counsel regarding
11	specific legal matters requiring the
12	provision
13	$-R \sqcup H \sqcup$
14	MAN IN GALLERY: Will you finish
15	your illegitimate meeting?
16	
17	MS. MORENO: of legal advice by
18	counsel concerning the Board's public
19	participation procedures for consideration
20	of the draft minor new source review permit
21	for Atlantic Coast Pipeline, LLC's,
22	Buckingham Compressor Station, registration
23	number 21599.
24	
25	MR. FERGUSON: Second.

1	MR. LANGFORD: Is there a second?
2	We have a second. There's a motion and a
3	second. All in favor of the motion, signify
4	by saying aye.
5	
6	BOARD MEMBERS: Aye.
7	
8	MR. LANGFORD: Opposed?
9	
10	MAN IN GALLERY: Nay. Nay. Are
11	the residents of Buckingham going to be
12	allowed in that meeting?
13	-KIIFIFI)(CC)P
14	MR. LANGFORD: The only person
15	going into the meeting with the Board is our
16	legal counsel, Matt Gooch. And the full
17	Board has, as stated here in public
18	public administration procedures
19	[inaudible]. And we will be back as soon as
20	
21	
22	MS. ROVNER: And we come back for
23	the vote.
24	
25	(The Board and counsel left the room to go

into closed session at 10:10 a.m., and returned at 1 10:43 a.m. The taking of testimony resumed as 2 follows:) 3 4 MR. LANGFORD: The Board has 5 completed their discussions in closed 6 7 meeting. May I have a motion, please. 8 9 MS. MORENO: I hereby move that the Board end its closed meeting and certify 10 that, to the best of each member's 11 knowledge, one, only public business matters 12 lawfully exempted from open meeting 13 requirements by Virginia law were discussed 14 in closed meeting, to which this 15 certification applies. 16 And two, only such public 17 business matters as were identified in the 18 motion convening the closed meeting were 19 heard, discussed or considered by the Board. 20 21 MR. LANGFORD: We have a motion --22 we have a motion. Is there a second? 23 24 25 MS. ROVNER: Second.

1	MR. LANGFORD: We have a motion and
2	a second. Ms. Berndt, would you do a roll
3	call, please.
4	
5	MS. BERNDT: Mr. Ferguson.
6	
7	MR. FERGUSON: Yes.
8	
9	MS. BERNDT: Ms. Rovner.
10	
11	MS. ROVNER: Yes.
12	EDTIFIED COD
13	MS. BERNDT: Ms. Moreno.
14	
15	MS. MORENO: Yes.
16	
17	MS. BERNDT: Mr. Langford.
18	
19	MR. LANGFORD: Yes. Thank you.
20	
21	MS. ROVNER: Mr. Chairman, I have a
22	motion.
23	
24	MR. LANGFORD: Go ahead.
25	

MS. ROVNER: Mr. Chairman, at the 1 last meeting, I asked a number of questions 2 3 during the meeting. And since the meeting, we have received a number of pieces of 4 5 information in response to those questions. And I would like for the 6 7 public to have an opportunity to respond to that information. And so I make a motion 8 9 that DEQ hold a public comment period, the minimum that is available to do -- that can 10 be done. 11 And that we hold a public 12 comment period and then vote on the permit 13 after that public comment period. 14 15 MR. LANGFORD: We have a motion to 16 have a minimum additional public comment 17 Is there a second to the motion? period. 18 19 MS. MORENO: I second the motion. 20 21 MR. LANGFORD: Is there discussion 22 on the motion? I will say that I -- for 23 myself, I think that we've had a lot of 24

25

public comment. I was at the hearing in --

1	in Buckingham and, obviously, at the one
2	here. And I've heard a lot of public
3	comment. I, for one, am not I don't see
4	the the advantage of holding that.
5	But I understand the concerns
6	by the Board members about that. Having
7	said that, is there any other comments on
8	on the motion? If not, I'll ask for a vote.
9	Let's do a recall on this as well.
10	
11	MS. BERNDT: Mr. Ferguson.
12	EDTIFIED OOD
13	MR. FERGUSON: Yes.
14	
15	MS. BERNDT: Ms. Rovner.
16	
17	MS. ROVNER: Yes.
18	
19	MS. BERNDT: Ms. Moreno.
20	
21	MS. MORENO: Yes.
22	
23	MS. BERNDT: Mr. Langford.
24	
25	MR. LANGFORD: No. Motion passes.

Yes, Ms. Berndt? 1 2 3 MS. BERNDT: Can I ask a clarifying question? 4 5 MR. LANGFORD: You may. 6 7 MS. BERNDT: Is there -- are there 8 9 specific documents that you want comment on? 10 MR. LANGFORD: Thank you for that 11 question. Yes. The reason for the comment 12 period is that there was -- in response to 13 14 questions from Board members, there were 15 some additional documents provided to Board members after the close of the comment 16 period. 17 A couple -- two, at least two 18 19 of the -- of the NGO's, non-governmental 20 organizations, that are -- have made comments on this rule making have asked to 21 have additional opportunity to comment on 22 those particular documents. And so a motion 23

documentation.

for the public comment is on the additional

24

25

MS. BERNDT: So the documents that 1 were sent out by email from me, those two 2 sets of documents, the document you all 3 received directly from -- on the 4 demographics from the [inaudible] Board, 5 that's to be included. 6 Are there any other documents 7 that you all have received directly that you 8 want to include? 9 10 MS. ROVNER: No. But I do have a 11 question for you. 12 13 14 MS. BERNDT: Okay. 15 MS. ROVNER: Are there any other 16 documents that DEO has received that we have 17 not received? 18 19 20 MS. BERNDT: There is one that had some clarifying demographic information that 21 was received in between what I think you 22 would've gotten the details on the 23 demographics in that report. 24

25

MS. ROVNER: So I would like to 1 include that. 2 3 4 MS. BERNDT: You want to include 5 that? That's actually from SCAC. 6 MS. MORENO: Ms. Berndt, ask our 7 8 counsel -- Mr. Gooch -- whether there are 9 documents that have not been identified that should be included. 10 11 MR. GOOCH: So you're asking beyond 12 the two sets of email that Cindy identified 13 and the EJSCREEN, ecologic report. I'm not 14 15 aware of any beyond what Cindy has identified. 16 17 MS. MORENO: Thank you. 18 19 20 MR. LANGFORD: And I assume, to the extent that those documents aren't already 21 on the Buckingham Compressor web site, 22 you'll update it -- you'll upload them and 23 they'll be available. And you'll work out 24 25 whatever details is required for the APA and when and how and all that.

MS. BERNDT: Yes, sir.

MR. LANGFORD: Okay. All right.

Staff's going to make a brief presentation today on the draft permit. And will be advising the Board of activities that occurred since the November meeting, some of which we have just finished talking about.

The -- before I call Mr. Dowd to begin the staff presentation, there are a few matters to address. I want to correct a statement made at the November 9, 2018, regarding the Board's suitability policy.

One of the Board members informed those in attendance that the Board's 1987 suitability policy had not been officially repealed. That's not the case.

The policy was officially rescinded by the Board at its December 15 and 16, 2008, meeting. So I just want to get that on the record. I want -- also want to advise everyone that the Board can consider additional amendments to the draft

permit. We could consider additional amendments. And -- and we'll talk about some -- without further public comment. But as you know, we've already said we're going to do further public comments on -- on some narrow issues.

Staff, acting on the Board's behalf, can and should address Board questions and requests without -- and throughout the permitting process, including after the close of the public comment period.

Staff also, routinely,
addresses questions and concerns raised
during the public comment period with an
applicant after we close the comment period.

This is standard operating procedure in the air permitting process and as well as all the other permitting processes.

As we already talked about, the additional information and the fact we're going to have a public comment on it.

Lastly, I would like to advise everyone that interference with an orderly and efficient

Board meeting or activities that interfere
with the right of others to speak is
prohibited, and could result in your removal
from the meeting.

Therefore, we ask that you refrain from interfering with the conduct of the meeting, from making comments while others are speaking. I appreciate your cooperation on that. Now I will call Mr. Dowd.

MR. DOWD: Trip over my own permit sheets there. Good morning. I'm Michael Dowd. I am the Director of the Air and Renewable Energy Division for DEQ. I'm appearing before the Board today -- I'm sorry.

MS. BERNDT: Get your microphone.

MR. DOWD: Okay. It was pretty loud when I did the test earlier. I'm appearing before the Board today to present, again, for the Board's consideration a proposed permit for the Buckingham

Compressor Station. At the Board's last meeting on November 8th and 9th, the Board deferred a decision on the proposed compressor station until today.

And of course, we've been overtaken by advance of the past few minutes. At the end of my presentation, I was going to make a staff recommendation. That may not be appropriate for today, but we'll get to that point when we get to it, Mr. Chairman.

At the November meeting, the Board asked DEQ to provide certain additional information to address questions regarding site suitability, demographics and environmental justice, which we will do today.

This morning, I and my colleague -- Pat Corbett -- will briefly describe the project and then address certain technical questions regarding the proposed permit the Board members raised at the last meeting that could benefit from more detailed answers. We will then present our issues relating to site suitability and

environmental justice that the Board members raised at the last meeting. Finally, we'll make our -- we won't make our staff recommendation, but will do so soon.

Okay. Slide two. The
Buckingham Compressor Station is one of
three compressor stations planned for the
Atlantic Coast Pipeline.

It is the only Atlantic Coast
Pipeline compressor station in Virginia, and
will be the most stringently regulated of
three. It uses four natural gas combustion
turbines of approximately 55,000 horse power
to pump gas through their pipeline.

The proposed compressor station is classified as a minor stationary source under Virginia's air permit regulations.

But for all intents and purposes, DEQ treated it as a major source in the permit process to insure retention of public health. This slide shows the location of the Buckingham Compressor Station. It is located in Buckingham County on -- on the north side of Route 56, 5.1

miles northwest of the intersection of Route 60 and Route 56. It is also important to note that the proposed compressor station is located where the Atlantic Coast Pipeline will intersect the existing Transcontinental gas pipeline, a major north-south pipeline.

Protection of public health and the environment are DEQ's most important goals. All Virginia air permits require both state of the art air pollution control and assurance the source will not cause any violation of health-based air quality standards, such as National Ambient Air Quality Standards or State air toxic standards.

Before discussing how DEQ air permits protect public health, it is important to place the permit process in context and describe how it is intended to function in the overall framework of the Clean Air Act and State Air Pollution Control law. The Clean Air Act envisions a federal/state partnership. First, EPA sets health-based national ambient air quality standards, which are commonly referred to as

the NAAQS. It is then the role of the
states to achieve and implement the NAAQS.

The State Air Pollution Control Board and
DEQ implement that NAAQS in Virginia under
the authority of the State Air Pollution
Control law.

The Clean Air Act requires the EPA to set the NAAQS at a level to protect public health with an adequate margin of safety based on evaluation of the most current health science.

The Clean Air Act requires that NAAQS be set at a level to protect sensitive populations such as children, the elderly and asthmatics.

EPA has established NAAQS for seven pollutants; ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, lead and two forms of particulate matter, PM10 and PM2.5.

The Clean Air Act requires the EPA to review and revise the NAAQS every five years based on the latest health science. Now, let me turn the presentation over to Pat Corbett, who will review the

technical aspects of the proposed permit in more detail.

MR. CORBETT: Thanks, Mike. As he said, my name is Pat Corbett. I work in the Office of Air Permit Programs. I'm going to do a brief overview, much more brief than the previous presentation in November about the permit action.

And then discuss the questions and answers that we had at that last meeting. So as we were talking about before, the application was initially received in 2015.

The Buckingham County Board of Supervisors approved the site. We received that local government body certification in February of 2017.

The application was substantially updated, removing pieces of equipment that were originally proposed and making minor changes to other pieces in August of 2017. And again, it was updated in 2018 reflecting all of the questions that we had had during our permit review process.

We completed a draft permit in August of 2018. We started a public comment period August 8th of 2018. We held an informational briefing in Buckingham County on August 16th of 2018.

We had a public hearing on September 11th of 2018. And we considered comments until September 21st, 2018. Previously discussed the BACT review process.

So just as a reminder, the result of our BACT review was that nitrogen oxide or NOx emissions are controlled by Selective Catalytic Reduction, or SCR.

Carbon monoxide, CO, VOC or

Volt Organic Compounds and Formaldehyde are
controlled by oxidation catalysts. And
then, there are various natural gas
emissions that are being controlled by a
vent gas reduction system and reduced
pressure for turbine blow-downs.

We're capping the pipe during emergency shutdown system tests. We're limiting the number of pigging events. And there's a required daily site walk-thru and

quarterly leak detection and repair surveys that require a permit for future use. There are some co-benefits.

The permit doesn't regulate methane, but reminding everybody that the capped ESD testing avoids 4.1M cubit feet of natural gas that would've otherwise been vented.

And as there are limitations on start-up and shutdown of the turbines, reduces the -- the emissions by over 100M cubic feet.

And then because the emissions are fugitive from leaks, it's un-quantifiable the reductions that we'll get from the daily walk-thru and quarterly leak detection.

So we talked previously about air quality analysis for dispersion modeling. As Mike mentioned the NAAQS are health-based concentrations that applies throughout the US. There are a variety of averaging times dependent on pollutant and that pollutant's impact on human health. It can be as short as one hour or as long as

one year. So the standards are based on the pollutant and its impact. And that Buckingham County currently meets and will continue to meet all ambient air quality standards.

So modeling background, what is a background? The background is used in our analysis to determine what the current status of the ambient air and the location is.

It's the measured concentration of pollution in the air. It would measure everything that's contributing to pollution in the air, including vehicles, nearby sources that -- that already have permits and are emitting.

It also includes things like dry cleaners and auto body repair shops, as well as interstate pollution -- pollution that travels to Virginia from other states.

It's important to note that the -- Buckingham has, you know, at least 24% less emission than the sites that we selected for our background concentration that we use in the model analysis. And all

areas that we used for the background concentrations are currently meeting the standards. Modeling results, we modeled several standards.

I'm not going to go through them with you. The NOx and NO2 standards, you have particulate matter. And then the one-hour annual formaldehyde and one-hour hexane standards.

And we go to that model and demonstrate compliance with all applicable standards. So ambient air impacts, what -- what is the ambient air? Ambient air is anywhere outside of the fence line.

A fence line is where a source has restricted the site access, literally put up a fence or other barrier that precludes the public from gaining access.

In our dispersion modeling analysis, the maximum impacts are on or very near the fence line, and actually occur for the most part on Dominion's property. So Dominion has a fence around the compressor station. And anywhere that's outside of that fence, even on Dominion's property, is

ambient air. And the impacts -- the maximum impacts occur for the most part on their property.

And then, we also did a look in -- into kind of give people an idea -- at the property line, the impacts are at least 58% lower.

In most cases, when you get to the property line, they're 80 to 90% lower than the modeled impacts that demonstrate compliance in our initial analysis.

So here's a -- a picture of what I'm talking about here. You can see in the green push pin, that is -- you know -- the center of the compressor station.

The yellow -- the four yellow right around those, that little fence line there -- that's actually the fence line.

And that's where the maximum impacts are for, as you can see starting on the right, one-hour hexane, the 24 annual PM2.5, the annual number two. Then you go around the fence line, the one-hour NO2, the eight-hour CO, the one-hour formaldehyde are all on Dominion's property on the fence line. Then

the annual Formaldehyde that is across the street, that's three percent of the annual Formaldehyde standard. So it's a very small portion of the -- the actual standard.

If you look in the upper left-hand corner, the approximate Buckingham Compressor Station property line, that's where that 80 to 90% reduction for most impacts occurs.

So we already have impacts that are, you know, below the standards.

And then, as you move off the property, it just drops off precipitously.

So that kind of summarizes what we've already talked about in -- in great detail in the previous meetings. Now, I'll go through the responses to questions that you felt like needed to be a little more cohesively answered.

One of the questions was how is a generic BACT analysis done. It's important to note that BACT is a case by case emission limitation. It applies to a particular unit at a particular site. It's not a standard that you apply arbitrarily to

every site. It's just -- you have to look at very specific circumstances. It takes into account environmental impacts, which are other benefits and impacts.

You can have benefits like reductions in methane that would be considered when we're determining what controls would -- we would require.

You would also have considerations like water usage. If you were going to use technology called a wet scrubber that uses water.

And there are water considerations that we would need to have in order to determine whether or not the controlled technology may apply at a given site. Control technologies can also generate waste.

We would consider the waste impacts when we're doing our review. And then there are economic impacts. And those are economic impacts on the source. And that's the -- generally a level playing field. That level playing field is important to make sure that we're complying

with standards the same way across an industry type. It's important that -- and required -- that the emission limitation be achievable during all times.

So that's a -- a key aspect of the BACT determination. It has to be achievable throughout the life time of the source. And then we also for -- for Buckingham, we accepted public comment.

And that allows, you know, non-governmental organizations, other sources and individuals to comment on any experience that they have where BACT may be more or less stringent than what we proposed.

And then, again, it's important to note that BACT is not final until the permit gets issued. So if there's no permit issued, there's no BACT to issue limitation that would be compared for future actions.

There were questions about the equipment leak repair adequacy. Again it's important to note, as I just described the overview, it was the result of a BACT

review. So it's a case by case determination of the most stringent reduction we can achieve. DEQ reviewed other BACT determinations which were just quarterly leak detection and repair.

That's the LDAR on your -- on the presentation. LDAR, leak detection and repair. You have 30 days to actually repair the leaks found.

We looked around and we determined that BACT was a daily walk-thru and a quarterly leak detection and repair as well. It has to be practical.

And -- and so the initial attempt with this -- with -- is within five days because there are a variety of leaks that could be happen -- that could happen at a site.

And our standard has to be achievable for any one of those possible leaks. So we have to provide enough time for the worse case scenario so that requirement is achievable. And then repair has to be completed within 15 days. So how was the number of turbine start-up and

shutdown events obtained? Again, this was a review. The turbines operate dependent on demand. So as gas demand changes, the turbine may start-up or shutdown.

So a source has to look at their business plan and -- and determine how much, in any one given year, a turbine may start-up or shutdown.

And they come and they compose the number of events based on their expectation of their operations. And then we review that based on similar operations and compare it to other permits for -- for similar operations.

In this particular case, the North Carolina-West Virginia ACP stations each have 100 events. So that, you know, is consistent with the business plan.

The Maryland St. Charles station that was proposed at the time, but it's my understanding it's on hold in Maryland, had 200 events. So -- and then most permits actually don't have any limits on start-up and shutdown. So that -- that's the -- the style of review that we're doing

to insure that we're getting the maximum production. One of the big questions was what are the -- what's the process for future possible changes?

And what if they want to make a change, expand capacity or reduce requirements. Any emissions increase may require a new permit, may require a new air quality analysis or a new BACT analysis.

It's hard to get any more detail than that because the regulations at the time will dictate how that review goes.

Lastly, what are the Chesapeake Bay impacts?

It's important to note that the TMDL process, which is a separate process than an air quality permit, they review the Clean Air Act requirements.

They're already factored in to the TMDL.

They review protected growth including into the future and the Clean Air Act requirements that are going to occur. The TMDL process determined that Clean Air Act requirements weren't required for specific sources. And then, of course, the TMDL process will be reviewed and that --

1	and that determination can be revisited at a
2	future site review. That's it. Now I'm
3	going to turn it back over to Mike.
4	
5	MR. LANGFORD: And TMDL
6	
7	MR. CORBETT: Oh, I'm sorry. Total
8	Maximum Daily Load.
9	
10	MR. DOWD: It's a term that deals
11	with how much of a particular pollutant is
12	allowed into a stream. And so those are
13	what what you were saying there is that
14	the water impacts are are already
15	calculated into the with the air
16	requirements.
17	
18	MR. LANGFORD: Yes, sir. Thank
19	you.
20	
21	MR. DOWD: Do you have another
22	slide?
23	
24	MR. CORBETT: Yeah, I'm sorry. I
25	thought I thought when you looked at me

-- I'm sorry. This is just a slide -- this 1 is a chart of the NOx reductions -- I'm 2 sorry -- in the Virginia plan. This is 3 including growth out to 2028. 4 5 You can see that we're projecting just Virginia's NOx reductions to 6 be over 200,000 tons. And that includes the 7 growth, which would include the Buckingham 8 9 Compressor Station at 34.2 tons a year. 10 And looking at it, MR. LANGFORD: 11 is that big blue bar -- that's automobiles. 12 Is that what that is? 13 14 I don't have the MR. CORBETT: 15 color-coded ones. Yes, I believe that --16 yes, I believe is the blue field. I'm 17 18 sorry. 19 20 MR. LANGFORD: You're close, but I'm talking about the -- well -- so the 21 biggest reduction is going to be the auto 22 23 sector. 24 MR. CORBETT: 25 Yes.

MR. LANGFORD: Thank you.

MR. DOWD: Thank you, Pat. And wait -- there we go. I'm Mike Dowd again. Let me now turn to issues raised by the Board members at the last meeting relating to site suitability and environmental justice.

Let me address site suitability first. Section 1307E.3 of the Virginia Code requires DEQ to consider the suitability of the activity to the area in which the proposed facility is located when issuing air permits.

Factors DEQ considered when preparing the proposed permit for the Buckingham Compressor Station with a final environmental impact statement prepared by the Federal Energy Regulatory Commission, or FERC, in July of 2017.

In particular, DEQ looked at sections on alternatives analysis and cultural resources. DEQ also considered the Union Hill-Woodson Corner Rural Historic District status request for the Department

of Historic Resources. And DEQ also looked at its inventory of emission sources in proximity to the compressor station location.

However, DEQ gave significant weight to the special use permit issued by the Buckingham County Board of Supervisors in January of 2017.

The Virginia Code provides localities with substantial authority when it comes to decisions relating to the use of local land.

Section 15.2-2200 of the Code states the law's intent to encourage localities to improve the public health, safety convenience and welfare of its citizens.

Localities are to use zoning as a means to plan and develop highway, utility, health, educational and recreational facilities.

In addition, localities must recognize the needs of agriculture, industry and business when making land use decisions. Section 15.2-2212 requires that members of

county planning commissions be residents of the locality, qualified my knowledge and experience to make decisions on community growth and development.

And Section 15.2-2280 states, any locality may -- by ordinance -- regulate, restrict, permit, prohibit and determine the use of land, building structures and other premises for agricultural, business, industrial, residential flood plane and other specific uses.

The Buckingham County Board of Supervisors approved the special use permit for the compressor station by a five to nothing vote with two abstentions on January 5th, 2017.

A letter from the Buckingham
County Zoning administrator for the Atlantic
Coast Pipeline on January 11th, 2017,
contained 41 detailed conditions that the
Board of Supervisors attached to the special
use permit. DEQ received certification of
the Board of Supervisors' approval of the
compressor station project on February 21st,

2017. It is important to note that DEQ can not issue an air permit until it has received certification from the local jurisdiction that the proposed permit has met all local ordinances and other requirements.

Among the 41 requirements of the special use permit are many that relate to the compressor station's operation, safety, emergency procedures, noise, light, traffic, compliance and enforcement.

I would like to discuss the special use permit in detail to illustrate just how comprehensive it is. Next slide. First, condition four addresses emergency response.

It states that during normal operating hours, the applicant is responsible for providing the first response to any emergency relating to the compressor station.

Importantly, the applicant
must prepare emergency preparedness plan in
accordance with the regulations of the
Pipeline and Hazardous Materials Safety

Administration or PHMSA. But Buckingham County's review and comment prior to when the compressor station starts operation.

Next. Condition 40 also deals with emergency response.

It requires an applicant to develop a crisis response plan that incorporates notifications to the Buckingham -- to Buckingham County so that if a gas leak, fire or other danger occurs, Buckingham County is promptly notified of the incident.

In addition, the applicant must implement a process to notify

Buckingham County prior to planned blowdown events. Conditions 33, 34, 35 and 36 of the special use permit address safety issues.

Shut off valves must be installed on both the inflow and outflow lines of the compressor station as well as at the connection with the Transco pipeline.

And these valves must be designed to operate automatically, remotely and manually. The monitoring system and valves must be programmed to alert personnel

to investigate and manually monitor the station when communications are lost. The special use permit also requires a back-up system for monitoring the communications in case the primary system fails.

In addition, the applicant must create a 50-foot fire break between the facility and adjacent properties.

Conditions nine and -- six and 18 relate to the regulation of noise from the station.

Noise mitigation measures must be taken and make all reasonable efforts to keep noise levels from normal plant operations to 55 decibels or less at the property lines.

The noise levels from normal plant operations must be less than 55 decibels at any adjacent existing building that is not on Dominion's property.

Finally, the compressor station must use silencers during blowdowns. Conditions eight, nine and 10 of the special use program regulate light. Exterior lighting must be directed downward and inward in order to prevent any glare on

adjacent properties. Exterior lighting for work areas of the compressor station must be switched off while not in use.

Lighting at the site must not exceed five-foot candles in exterior working areas and two-foot candles in parking and non-working areas. All lighting must be shielded to prevent light pollution.

And finally, light trespass
must be limited and should not exceed
0.5-foot candles. The last conditions of
the special use permit I want to mention are
12, 15, 16 and 20, which relate to location,
buffer and traffic.

These conditions require the compressor station and accessory facilities to be centrally located on the property.

Fencing and all structures must have a minimum setback of 100 feet from the property lines.

Existing trees along the northwestern property line and along the front of the property must be maintained as a buffer for the life of the station. And finally, a traffic management plan must be

submitted and approved by VDOT as part of the overall site development plan. Now, this discussion should give a good sense of the scope and detail of the special use permit.

And importantly, the special use permit addresses many -- if not all -- of the non-air related safety, emergency response and quality of life issues that were raised in comments from residents received by DEQ.

Now, in addition to the Buckingham County Board of Supervisors special use permit, we also considered the final Environmental Impact Statement prepared by the Federal Energy Regulatory Commission.

The Environmental Impact
Statement was completed by FERC in July of
2017. The two sections of EIS that were of
most interest to DEQ with respect to site
suitability were the alternatives analysis
and cultural resources analysis. The
alternatives analysis contained two relative
components, the no action alternative and a

section that considered an alternative location for the proposed compressor station.

The cultural resources analysis contained five components relating to the archaeological survey, the historic structures surveys, the special Union Hill area survey, the unanticipated discovery plan and the programmatic agreement.

I'll turn first to FERC's no action alternative analysis. The no action alternative addressed broadly whether the Atlantic Coast Pipeline should be built at all, and did not focus on the pipeline's three proposed compressor stations.

FERC's final environmental impact statement rejected the no action alternative. In particular, the FERC said the lack -- and this is a quote.

The lack of a new pipeline with access to supply sources in the region could prolong the existing supply constraints in the proposed delivery areas, which could create winter-premium pricing and exacerbate price volatility for all

natural gas users in the areas, and could increase the difficulty for others in finding economical gas supplies.

The FERC also said the burning of natural gas at power plants to produce electricity results in reduced air emissions compared to other fossil fuels, such as coal and fuel oil.

According to the EPA, natural gas produces at least 50% less carbon dioxide, almost 70% less NOx or -- oxides of nitrogen. And about 99% less sulfur dioxide compared to a coal-fired power plant. Next.

In summary, the FERC said the no action alternative would avoid the environmental impact to the proposed projects, but would likely result in the need for an alternative energy means to satisfy the demand for natural gas and energy in the project area.

Given consideration of these factors, we conclude that the no action alternative is not preferable to the ACP and we do not recommend it. That is firm. Next slide. On a more granular scale, FERC's

environmental impact statement considered one alternative site to the present location of the proposed compressor station. The alternative site is located at Midland Road, 1.9 miles southwest of the present site.

I want to mention here that there are factors that constrain where the other locations are acceptable as alternative sites for the compressor station in this case.

Those factors include sufficient land, access to the Transco pipeline and a willing seller because eminent domain is not an available option for the construction of the pipeline compressor station.

With respect to the alternative site, FERC found the environmental impacts between the proposed site and the Midland Road alternative were similar, but the alternative site would require an additional one mile of pipeline and would increase the construction footprint of the Atlantic Coast Pipeline. The FERC also found the operation of a

compressor station would not cause or contribute to a violation of federal air quality standards.

And did not believe health would be adversely effected or that the alternative site would be necessary for reasons of air quality or public health.

Next slide.

First, EIS noted that the Norwood-Wingina and Warminster Historic Districts were 4.5 and 5.9 miles from the proposed compressor station site respectively.

And that Yogaville is over 4.5 miles away from the site. The EIS said these areas would not be affected by construction or operation of the facility.

And that moving the compressor station 1.9 miles to the southwest would not provide a measurable benefit to those areas. The FERC concluded that the Midland Road alternative compression station did not offer significant advantages and did not recommend it. And now I want to turn to FERC's cultural resource assessment found in

the environmental impact statement. The FERC, the Virginia Department of Historic Resources and the applicant coordinated on cultural resource assessment to the area surrounding the proposed Buckingham Compressor Station.

The cultural resource assessment included a Phase 1 archaeological survey conducted on the site in 2015 and 2016 by the applicant's consultant.

The Phase 1 assessment found no previously recorded or new archaeological sites, cemeteries or other cultural resources.

The Department of Historic Resources concurred with this assessment in February of 2017. The applicant's consultant also conducted historic structures surveys between 2015 and 2018.

The historic structures
surveys found no structures eligible for
listing on the National Register of Historic
Places. The Department of Historic
Resources, or DHR, concurred with those
findings in 2018. At the FERC's request, in

April of 2017, the applicant's consultant re-surveyed the area surrounding the Buckingham Compressor Station site with the goal to, quote, identify resources that were integral to the development of the area as an African-American community associated with Union Hill and Union Grove Baptist Churches in the post-Civil War era, end quote.

As part of this survey, the consultant also conducted historical research at local repositories and photographed structures located within one half mile radius of the compressor station in order to document the historic character of the surrounding community.

The findings of this special survey indicated that the area surrounding the compressor station is, quoting the consultant, dominated by rural, non-farm residences constructed since World War II and generally lacking the historic built environment and agricultural landscape features that characterize the area's late 19th and early 20th century development as a

distinct community. The special -- this special survey was conducted in the spring of 2017. And the Department of Historic Resources concurred with its findings in July of 2017.

There are two other documents associated with FERC's environmental impact statement that helped assure -- that help assure the continued protection of the cultural resources, both during and after construction of the compression station.

The first was the unanticipated discovery plan. The unanticipated discovery plan sets forth the procedures that the applicant will undertake in the event that previously unreported and unanticipated cultural materials or human remains are found during the construction of the pipeline.

The unanticipated discovery plan was submitted to FERC in January 2018. The second document is the programmatic agreement among the FERC, the applicant and the Virginia Department of Historic Resources which assures compliance by the

applicant with the National Historic

Preservation Act. The programmatic

agreement was entered into in January of
2018.

I now want to discuss something unrelated to FERC, but that was considered by DEQ relating to the historic nature of the area surrounding the Buckingham Compressor Station.

In February 2017, an organization called Preserve Virginia requested the Department of Historic Resources designate Union Hill and Woodson Corner a rural historic district.

The preliminary information form submitted to DHR stated that, the significance of the proposed Union Hill/Woods Corner historic district stems from the manner in which the plantation land became, after Emancipation, a community established after the Civil War by Freedmen and a large number of emancipated African-Americans. A majority of the current residents of Union Hill are descendents of the Freedmen and slaves who started the

1 community. The DHR visited the area and
2 asked follow up questions of the applicant
3 in May 2017.
4 Now, the Department of

Historic Resources has concluded that on the information provided to it so far, the area does not qualify for rural historic district status for several reasons.

DHR said that while the area's history is compelling, it does not differ from the history of Buckingham County as a whole. Other reasons given by DHR for its conclusion was a lack of surviving historically relevant structures.

The intense logging and deforestation of the area that likely destroyed relevant archaeology, and the existence of few surviving Reconstruction era and early 20th century clustered settlements to represent the context of African-American heritage.

MAN IN GALLERY: How can y'all decide that?

(At this time, members in the gallery 1 briefly interrupted the speaker by shouting.) 2 3 MR. DOWD: Now, let's return the 4 topic that cites the ability to --5 6 7 MR. LANGFORD: Just a minute, Mr. Dowd. Will the people in the audience 8 9 please refrain from making any comments. 10 MAN IN GALLERY: No. 11 12 MR. LANGFORD: If not, I'm -- I 13 will ask the Capital Police to intervene. 14 15 Thank you for not making comments. Mr. Dowd, you may continue. 16 17 MR. DOWD: Thanks a lot. Now let 18 me turn from the topic of site suitability 19 to environmental justice. I want to begin 20 by mentioning a few items that are relative 21 to the consideration of environmental 22 justice issues in Virginia. In Executive 23 Order 73 of 2017, Governor MacAuliffe 24

defined environmental justice as the fair

25

and meaningful involvement of all people, regardless of race, color, faith, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

In addition, Virginia Code
67-102.12, which is one of the few Virginia
Code divisions that touches on the subject
of environmental justice, states that it is
the objective of the Commonwealth to develop
energy resources and facilities in a manner
that does not impose a disproportionate
adverse impact on economically disadvantaged
or minority communities.

And finally, I want to note that the section of the 2018 Virginia Energy Plan that discusses environmental justice, the Energy Plan says DEQ's existing obligations to ensure that all regulated entities comply with health-based standards will continue in all permitting activities to reduce public health burdens on all populations. Okay. Now, factors DEQ considered when assessing environmental

justice in this case included air modeling, which indicates emissions from the proposed compressor station will not result in harm to human health.

DEQ also considered the results of EJSCREEN, which I will discuss at length in a second. We also considered the public comments, in particular, the study done by Dr. Lakshmi Fjord.

Finally, DEQ considered the environmental justice analysis contained in the Federal Energy Regulatory Commission final environmental impact statement.

And additional available information includes the demographic analysis prepared by ESRI at the Board's request made at the last meeting. Next slide. Let me now discuss EJSCREEN.

as an environmental justice mapping and screening tool with a nationally consistent dataset and approach for combining environmental and demographic indicators.

When developing EJSCREEN, EPA incorporated recommendations from the National

Environmental Justice Advisory Council, known as NEJAC. Now, I want to make clear that EJSCREEN should only be used as a screening tool, and is an indicator if further investigation is warranted.

And that's exactly how DEQ used it. Next slide. For a given study area, DEQ will present six demographic indicators.

The first demographic indicator is the percent of the study area's population that is low income, which is defined as less than or equal to twice the federal poverty level.

The second indicator is the percent of the population that is minority, which is defined as anyone other than a single race, non-Hispanic white person.

The third indicator is the percent of the population which has less than a high school education. The fourth indicator is the percent of the population that is linguistically isolated. The fifth indicator is the percent of the population that is under the age of five. And the

sixth demographic indicator is the percent of the population that is over the age of 64. Next slide. Now EJSCREEN also presents 11 environmental impact indicators.

These include environmental impact indicators for PM2.5 particulate matter, ozone, the National Air Toxics Assessment or NATA based exposure to diesel particulate matter.

Now just as an aside, NATA, or the National Toxics Assessment -- NATA -- refers to EPA's ongoing evaluation of national air toxics exposure. The fourth environmental indicator is the NATA cancer risk set forth as risk per million.

The next environmental indicator is NATA respiratory hazard index.

And the sixth indicator is traffic proximity and volume.

The next is the lead paint indicator, based on percentage of pre-1960's housing in the area. The eighth environmental indicator is proximity to superfund sites. Next is proximity to facilities with risk management plans. The

10th environmental indicator is proximity to facilities producing and storing hazardous waste. And finally, EJSCREEN -- the newest environmental impact indicator is from wastewater discharge.

Now, the data for the six demographic indicators that's presented by EJSCREEN is percentage of population in the study area.

And it is compared to the population percentages for the same indicator for the state, the EPA region it's in and the nation.

The data for the 11 environmental indicators is presented by EJSCREEN as an impact value unique to each indicator.

Each environmental impact for a studied area is also presented as percentiles, comparing the impact in the studied area with the information for the same indicator the state, EPA region and nation. Now, the higher the percentile, the greater the relative risk or impact. A number greater than the 50th percentile

means the risk posed to the population of a 1 studied area by that indicator is greater 2 3 than the risk posed from the population of the state as a whole for the same indicator. 4 Conversely, a number below the 5 50th percentile means the risk posed to the 6 7 population in the studied area by that indicator is less than the risk posed to the 8 9 population of the state as a whole. Okay, next slide. Now let me 10 discuss the results of EJ -- DEQ's EJ run --11 EJSCREEN runs. DEQ conducted four EJSCREEN 12 runs centered on the location of the 13 14 proposed Buckingham Compressor Station. 15 We did runs of one-, two-, five- and 20-mile radiuses from the site. 16 The demographic data were consistent for all 17 four runs. The minority population varied 18 37 and 39% versus the Virginia average of 19 20 37% minority. 21 22 MAN IN GALLERY: That's not true. 23 (At this time, members in the gallery 24

interrupted the speaker by shouting.)

25

MR. DOWD: The low income population varied between 39 and 41% versus a Virginia average of 27% low income. The population with less than a high school education varied between 19 and 24% versus a Virginia average of 11%.

And the population of residents older than 64 varied between 16 and 22% versus a Virginia average of 14% of the population older than 64. Now, the EJSCREEN results of the environmental impact indicators were interesting.

Seven of the environmental impact indicators fell below the 20th percentile for risk for the area surrounding the Buckingham Compressor Station when compared to Virginia as a whole for those four runs.

The two point -- the PM2.5 indicator varied between the 10th and the 15th percentile. The ozone indicator fell into a third percentile. The NATA diesel PM indicator ranged from between the fifth to the seventh percentile. The NATA air toxics cancer risk indicator is in the 20th

percentile. The NATA respiratory hazard index indicator was in the sixth to seventh percentile. The traffic proximity indicator ranged from the sixth to the 18th percentile, which increased with distance from the compressor station.

The hazardous waste proximity indicator ranged from fourth to the sixth percentile. Now, an eighth environmental impact indicator proximity of RPM -- a facility, risk management planning facility -- ranged from the 16th to the 48th percentile, which also increased with distance from the compressor station location.

Next slide. Now only three non-air-related environmental impact indicators fell above the 50th percentile when compared to the state as a whole for these indicators.

The lead paint indicator ranged from the 61st to 62nd percentile due to percentage -- due to the percentage of pre-1960's housing in the area. The superfund proximity indicator ranged from

the 58th to the 80th percentile due to the presence of the Buckingham County Landfill superfund site, which his approximately 10 miles away from the compressor station.

And finally, the new wastewater discharge indicator ranged from the 82nd to the 90th percentile. Now that percentile sounds high and we looked into it.

There were really very few wastewater discharges around the area. We contacted the EPA about it. And the EPA noted to us that this is -- this is the newest indicator the EPA folks are looking at.

They believe it is a glitch in the data. And they don't understand either what we're trying to figure out. So since this is going to public comment, maybe we can receive comment on that question.

Because it's in our new...

Okay, next slide. EJSCREEN results indicate that the residents of the area surrounding the Buckingham Compressor Station overall face potential environmental

risks below those faced by Virginia 1 residents as a whole. 2 3 MAN IN GALLERY: No. 4 5 MR. DOWD: Seven of the 11 6 environmental indicators --7 8 9 (At this time, members of the gallery interrupted the speaker by shouting.) 10 11 MR. DOWD: -- show impacts of the 12 area surrounding the compressor station to 13 be substantially below the risks posed to 14 state residents as a whole for those 15 indicators. 16 One of the environmental 17 indicators, the RPM proximity indicator, 18 19 showed impacts of the area to be somewhat 20 below that as the state as a whole for the indicator. 21 And only three non-air-related 22 environmental impact indicators fall above 23 the 50th percentile when compared to the 24 state as a whole for those indicators. Τ 25

now turn to the environmental justice 1 analysis contained in the Federal Energy 2 Regulatory Commission's final environmental 3 impact statement. 4 5 In its EIS, the FERC noted only one potential environmental justice 6 issue related to the Buckingham Compressor 7 Station. That concerning the rates of 8 9 asthma in minority populations. The FERC environmental impact 10 statement said that in view of the high 11 rates of asthma within the overall African-12 American community, we consider this 13 community especially sensitive. 14 15 African-American populations have a greater prevalence of asthma. 16 Next slide. 17 18 19 MAN IN GALLERY: Because of the 20 compressor station. 21 MR. DOWD: However, the FERC has 22 concluded --23 24 (At this time, members of the gallery 25

interrupted the speaker by shouting.) 1 2 MR. LANGFORD: Officers, would you 3 take of that? I'm going to call a recess. 4 5 (At this time, the Air Pollution Control 6 7 Board meeting stood in recess at 11:36 a.m, and resumed at 11:40 a.m. The taking of testimony 8 resumed as follows:) 9 10 Everybody take their MR. LANGFORD: 11 seats. I'll remind people that those sorts 12 of activities are not helpful. I understand 13 that many of you don't agree with some of 14 the things that are being said or opinions 15 of our other agencies. 16 That's okay. And you are 17 going to have an opportunity for public 18 comment. We've already said that, so you'll 19 20 have the opportunity -- in the proper forum -- to express your disagreement with those. 21 But in order to keep our 22 meeting going, we do have to ask for -- to 23 maintain order and let the speakers proceed. 24 Mr. Dowd. 25

MR. DOWD: Okay. Thank you,

Mr. Chairman. Just to conclude with the -with the FERC analysis. The FERC concluded,
however, despite the prevalence of -- of -prevalence of asthma in the African-American
community, the FERC concluded that health
impacts from the compressor station
emissions would be moderate because while
they would be permanent facilities, air
emissions would not exceed regulatory
permitable levels.

As a result, no

disproportionately high and adverse impact on environmental justice populations as a result of air quality impacts, including impacts from the -- associated with the proposed Compressor Station 2, or the Buckingham County Compressor Station, would be expected as a result of the ACP.

In addition, FERC also concluded that while the area surrounding the Buckingham Compressor Station qualified as an environmental justice area for the low income population indicator, it can not quality for the minority population

indicator. Other materials pertaining to environmental justice included Dr. Fjord's analysis, which concluded that the population with -- within 1.1 miles of the proposed location of the compressor station was 83% minority.

Dr. Fjord's analysis was based on a house to house survey. Now it is important to note here in both the EJSCREEN and the FERC EJ analysis relied on census tract data to generate their results.

Another piece of information pertaining to environmental justice is the updated ESRI demographic analysis that was requested by the Board in the November meeting.

The ESRI analysis also relied on census data for its results, just like the EJSCREEN and the FERC EJ analysis, as I mentioned before.

The ESRI analysis concludes that the area within one-half mile of the proposed compressor station is 22% minority. The area within one mile, 29% minority and the area within two miles is 28.5% minority.

The ESRI analysis further concludes that the per capita and median household income of the area around the Buckingham Compressor Station is actually higher than that of the state as a whole.

Finally, the results of the ESRI analysis were reviewed by VCU Douglas Wilder School of Public Policy. Now in summary, Dr. Fjord's analysis indicates the area surrounding the Buckingham Compressor Station is clearly an environmental justice area for minority population.

The FERC environmental justice analysis, on the other hand, concludes the area surrounding the compressor station is EJ area only with respect to low income population.

In the updated ESRI analysis concludes that the area surrounding the compressor station is not an environmental justice area for either minority population category or the lower income population category. In the EJSCREEN demographic, the indicator found the minority population around the compressor station to be in the

range of 37 to 39%. In conclusion, regardless of the percentage of the minority population, air modeling indicates that emissions from the proposed Buckingham Compressor Station will not harm human health.

In addition, the area surrounding the compressor station contains few existing air pollution sources and far fewer than the Virginia average.

The available data indicate that the environmental and health risks faced by residents of the area surrounding the Buckingham Compressor Station overall are lower than those faced by the residents of Virginia as a whole.

And finally, no data indicate the proposed compressor station would impose any disproportionate adverse environmental impacts on the surrounding area when compared to Virginia as a whole.

Now, that basically concludes
my presentation. Before taking questions -Mr. Chairman, I look to you for guidance on
this -- we have worked with various Board

members answering questions and working on some language. Should I discuss the revisions? Some proposed --

MS. ROVNER: Yes, Mr. Dowd.

MR. DOWD: Okay. Okay, sure. Take me to -- what's on slide 39? Is that recommendations? I don't want to do a recommendation. So stay at conclusions, okay.

I'd like to defer questions until after I talk about one other thing about the permit. Based on public comment, Dominion's presentation at the November Board meeting, discussion between DEQ and individual Board members and discussion between DEQ and Dominion.

DEQ has worked to provide permit language to implement several changes requested by those Board members. All of these changes make the permit more stringent than that proposed by staff. DEQ has worked with Dominion to assure the accuracy of the language and has obtained Dominion's

1	concurrence that the language is acceptable.
2	And while the revisions that would be
3	proposed to the draft permit are not part of
4	the DEQ staff recommendation and will not
5	be part of it DEQ does not object to any
6	of these changes.
7	Mr. Chairman, if you'd like we
8	can describe those changes to the proposed
9	permit now. Is that
10	
11	MR. LANGFORD: Yes. I think the
12	Board
13	$-R \sqcup H \sqcup H \sqcup (G(G) P)$
14	MR. DOWD: I will turn the
15	presentation back over to Mr. Corbett.
16	
17	MR. LANGFORD: The Board would like
18	to hear that.
19	
20	MR. DOWD: Yes.
21	
22	MR. LANGFORD: Mr. Dowd, I think
23	Ms. Moreno has a question.
24	
25	MD DOWD. Voc

MS. MORENO: Yes. I just wanted to -- and I know the answer, but I wanted to -- to hear from you to make sure that the proposed changes we're going to discuss are also responsive of the permit.

MR. DOWD: Yes. Yes, ma'am.

MR. CORBETT: All right. As discussed, I'm going to provide a brief overview of the possible amendments. First, I'm going to discuss the amendments that Dominion proposed at the November Board meeting.

And then I'll go through a more detailed review of the actual permit language changes for the Board's consideration. So continuous emission monitoring systems, or CEMS.

Dominion proposed to install CEMS for NOx on the turbines. So we have created permit language that requires those CEMS to be operated. CEMS have in-depth data handling and quality control assurance procedures that run through EPA's -- I'm

1	sorry, that run through EPA's approved
2	procedures, that promulgate good
3	regulations, and they're quite lengthy. DEQ
4	must approve the plan and any deviations
5	from EPA's approved approach.
6	And then, the language
7	requires quarterly reporting of the summary
8	data in the permit.
9	
10	MR. LANGFORD: Just to be clear,
11	these are continuous emission monitors on
12	the exhaust discharge of the natural gas
13	turbines
14	
15	MR. CORBETT: Yes.
16	
17	MR. LANGFORD: after the control
18	devices selected again by the reduction of
19	the SCR devices.
20	
21	MR. CORBETT: Yes. These monitors
22	will
23	
24	MR. LANGFORD: They're for the
25	actual NOx that is leaving the the

individual turbines going into the atmosphere. Thank you.

MR. CORBETT: Yes. In order to demonstrate compliance with the emission limitations in the permit. Dominion also proposed to do semi-annual carbon monoxide and VOC volatile organic compound monitoring.

So the permit requires monitoring of CO and VOC emissions, again, after control devices for each turbine to -- to verify that they're in compliance with the limits.

It requires reporting of the data collected. The initial frequency, while Dominion proposed semi-annual, is actually based on hours of operation. And it is akin to monthly monitoring.

And then the language also provides for a reduction in monitoring frequency if the data indicates consistent compliant operations at the facility. That frequency reduction must be approved by DEQ. And it can be no less frequent than semi-

annually. So that -- that's as far as it can be -- can be reduced to. Dominion also proposed ambient monitoring. So the permit requires the compressor station to purchase, operate and maintain an ambient monitoring station or stations for NO², nitrogen dioxide, and PM2.5.

It requires a plan that provides for the siting, operation and maintenance of the station in accordance with EPA requirements. Again, these requirements are quite lengthy, so we handled that through a plan.

DEQ and the EPA will be reviewing and approving the plan. Siting will need to meet the EPA criteria. And DEQ has determined that we want the monitors located at or as near as possible to the maximum modeled impacts.

DEQ will also solicit input from local stakeholders on the siting of the monitors. This is to make sure some -- some communities would prefer to have monitor sites at a local school where that data may not represent the maximum impact. But it

may be what the community wants. And then

it also requires BCS to provide the data so

it can be publicly available.

And now you talk. So now -I'm sorry. Now we'll go through the actual
permit language. Those were the amendments
proposed by Dominion during the year.

And then we'll go through the permit language to cover amendments responsive to public comments that the Board requested and the Board members requested and other language. That's going to be a second before we pull those up.

MR. LANGFORD: And while you're doing that, these -- the actual permit language has been provided to -- in the Board book prior to this so Board members have had a chance to see the numerous places where they intent to be inserted and added and -- and so forth.

MR. CORBETT: Yes. So -- so now that that's up there, there are two colors in here that we'll see. One is blue. These

are the changes since the November Board meeting. The other is red. Those are changes that were actually tracked and proposed for the -- proposed to be considered.

So I'm only going to cover the blue changes. So the -- the first change is on the first page in the draft cover letter, in the fourth paragraph.

We've added a sentence clarifying that the liquid collected during station operations must be handled in accordance with the solid and waste regulations. That was in response to comments.

On page six, in permit condition one, if you're moving through the permit. We've added a sentence that clarifies that the operation of the turbine below 50% load, which would result in higher emissions, is prohibited.

Operation -- it's a clarification. It was always prohibited, but operation below 50% load is only allowed during start-up and shutdown. The next

change is on the top of page nine. In condition 7A, we've added the phrase an approved fugitive emission component plan.

And that's to clarify that DEQ must approve that plan.

Towards the bottom of the same page, still in condition 7. 7E -- sorry, 7E has been added. And that requires specific reporting for leak surveys, including the leaks found and the corrective actions taken.

Next change is on page 11. On page 11 in condition 16, two changes have been made. Sorry, the first is to require VOC analysis in addition to the sulfur analysis that was already required for the natural gas burned at the station.

That requires a VOC analysis.

The second is to adjust the language towards the end to clarify that the standard report format is for performance test, testing stack emissions. And this test will not demonstrate -- or not provide the same style of information. So the plan -- the report must be approved by DEQ. And that's just a

clarification. The next change is in the middle of page 15 and conditions 29 and 30. You can see -- you can see condition 29 here.

We've added the phrase, and approved by, to clarify that the protocol or the testing plan -- we call it protocol -- must be approved before performing the test, must be approved by DEQ.

The same change has been made in condition 30. On the top of page 16, conditions 31, 32. A sentence has been added to clarify that the test details must be approved by DEQ.

Again, the same thing as the protocol that was before. In condition 33, the phrase, and approved by, has been added. Again, clarifying DEQ must approve the -- the plan -- the protocol.

And at the bottom of the same page in condition 34, we've clarified that the detail of the test must be approved by DEQ for the vent gas reduction system testing to verify that it's operating properly. But those test plans must be

approved by DEQ. And then, again, to
clarify that the -- the results of the
testing won't fit the standard format that
DEQ uses, so that the format of the test
final report must be approved by DEQ as
well.

So on page 17, this -- at the top of page 17 is the end of that condition I just discussed. Now we're going to talk about condition 35. It starts on page 17.

And this -- this change -- it ends with condition A on page 18. As I said, these are the reasons that I developed slides for the CEMS requirements. There are numerous CEMS requirements.

You can see, just to put it in standard DEQ language that we use when we are requiring CEMS. It's four conditions. It's -- it's quite a lot of records and EPA requirements that are already out there and well established.

MR. LANGFORD: Yeah. And just to clarify, there are various sources in the Commonwealth that already have continuous

emission monitors. And those monitors are 1 operated in this same manner. And they're 2 3 under protocols established by the Department and by the Environmental 4 5 Protection Agency. And now those have to be done and monitored and -- and maintained. 6 7 MR. CORBETT: Yes, sir. 8 9 10 MR. LANGFORD: Thank you. That's -- that's another reason why it's so long. 11 12 MR. CORBETT: Yes, it is. And some 13 of the references are, you know, 15 whole 14 15 pages of -- of things. So beginning on --I'm sorry -- on page 18 further down, we 16 have conditions 39, 40 and 41. 17 Those are the Dominion 18 proposed CO and VOC monitoring requirements. 19 20 It lays out the requirements that -- to -as Dominion proposed during the November 21 meeting. 22 The conditions require DEQ 23

And any future reductions in

approval of the monitoring details and

24

25

reports.

monitoring frequency must be approved by DEQ. It's important to note that the data that DEQ will rely on is at least 24 monitoring events.

So we will have 24 events' worth of data before there is an allowed reduction in frequency. That could take some time. All right.

Starting at the bottom of page 18, condition 42 covers the ambient monitoring requirements that Dominion proposed. PM -- as I mentioned, PM2.5 and nitrogen oxide, nitrogen dioxide.

All of the provisions work together with these three provisions to insure that the monitor is sited in a manner that's acceptable and -- and follows EPA's criteria.

And also lays out that we'll obtain both stakeholder input on the siting of the monitor.

MR. LANGFORD: And again, for -for the benefit of the audience, the ambient
air quality monitors -- there's a number of

them located across the Commonwealth that are operated by DEQ as having -- that happens when you deal on your ozone, Code Orange day or such and such as that.

And they are subject to very stringent requirements from the EPA about where to site them, how to run them, how to maintain them and -- and make sure they're -- they're accurate.

So -- so we're adding -- and that's why, again, we have a lot of language here. But it's all -- it's not new stuff. It's all stuff that's been done by the State for a long time. And -- and so it's -- that's the point I wanted to make.

MR. CORBETT: Correct, thank you.

Okay. So moving through the conditions.

The next condition is condition 43. This condition requires monitoring of VOC during venting events -- the initial venting events so that we can determine and assure that the modeling analysis is appropriate and accurate. The VOC testing does obtain hexane data which, of course, is of a

concern with a natural gas venting event.

We're also requiring the VOC testing -- this
is ambient testing, so again, not testing

from the stack.

And so to clarify, it's actual ambient testing located as close as we can to the maximum impact. So it will obtain hexane data.

We're also requiring that during the emergency ambient test to verify that the VOC emissions are -- are impacting the area as we expected.

It's their technical issues with obtaining direct Formaldehyde data that would be representative of a three-hour stack test because the air flows and the method requires additional data.

Which would actually dilute the results so that we'd collect more ambient air than actually would have the higher concentrations of Formaldehyde.

And so it would result in a lower number, it's not worth really collecting. And so that's why we're collecting VOC data to make that submission

-- that correlation, sorry. That was not proposed by Dominion. That was in response to the public concern. The next change is, again, at the bottom of page 44 -- page 19, condition 44.

Lots of numbers. We added the phrase, and approved by, to clarify that the records format must be approved by DEQ.

Next change is on the bottom of page 20.

Again, as I mentioned, on this page there are some reg changes that were in the original November permit. We added new records that require for the -- all of these conditions that we -- are now new to the permit.

And we have to require records to demonstrate compliance with those conditions. So that's what those three conditions do. Condition 45 on page 21. Sorry.

This draft permit was semiannual, essentially, compliance
certification where the source had to
demonstrate or certify compliance with all
the requirements of the permit. That

1	frequency has been reduced to quarterly.
2	And that we've also added the new leak
3	survey reports.
4	In a sense, reports that are
5	required out of condition continuous
6	emission monitoring system reports that are
7	required now by permit. So that's in D and
8	in E.
9	
10	MR. LANGFORD: And those some of
11	that is in response to at least some
12	comments that were made by public about
13	reporting.
14	
15	MR. CORBETT: Yes, yes. And and
16	data
17	
18	MR. LANGFORD: And the data will be
19	more available?
20	
21	MR. CORBETT: Yes.
22	
23	MR. LANGFORD: Thank you.
24	
25	MR. CORBETT: Sorry. The next is

on page 25. Condition 58. Added the phrase, and approved by. Again, the same thing, the testing plan or protocol must be approved by DEQ as a clarification.

We've also done that in condition 59. The language is on page 26. Condition 60 has been added on page 26. And this requires hexane testing of the natural gas.

The -- this language is the same as the language for the VOC and sulfur testing that I already discussed. And it's separate because the hexane requirements are under a different regulatory authority, the State toxic rule is what we call that which is the State only enforceable.

So it goes in a separate section of the permit because of the separate regulatory authority. But other than that, there are no changes to the language.

And then in condition 61, again, we added and approved by, for clarification. And then this new fuel analysis that was also added for the permit

1	requirements. And that concludes the review
2	of the possible language.
3	
4	MR. LANGFORD: Thank you.
5	Ms. Moreno.
6	
7	MS. MORENO: I move that the Board
8	approve the additional amendments to the
9	BACT permit recommended by DEQ staff at the
10	November 8th and 9th, 2018, meeting as
11	presented by staff today and as explained in
12	the outline of possible amendments.
13	And as shown in blue in the
14	draft permit provided today. Thank you,
15	Mr. Langford.
16	
17	MR. LANGFORD: Is there a second to
18	the motion? Just second the motion. We'll
19	have an opportunity to talk.
20	
21	MR. FERGUSON: Second.
22	
23	MR. LANGFORD: We have a second.
24	We have a motion and a second. Ms. Rovner?
25	

MS. ROVNER: So the motion is just 1 that the draft permit will now include this 2 3 language. 4 5 MR. LANGFORD: Right. 6 7 MS. ROVNER: It's not an approval. 8 9 MR. LANGFORD: Correct. This is 10 not an action on the permit because we have an additional public comment period. 11 that has to be postponed until -- until 12 after that comment period. 13 This is just a -- an action to 14 15 -- to include some of the things that were brought up during the original public 16 comment and at the request of Board members 17 for inclusion in the permit so that we would 18 have a full permit then to deal with. 19 20 And going forward the correct -- not on the permit. Just hold it on a 21 meeting. Does anybody have any -- any 22

none, all those in favor of the motion to

questions or comments on the motion? Seeing

include these blue amendments into the draft

23

24

25

permit, signify by saying aye. 1 2 3 BOARD MEMBERS: Aye. 4 5 MR. LANGFORD: Those opposed say That motion is carried. Mr. Paylor? 6 no. 7 I just would like to MR. PAYLOR: 8 9 clarify my understanding and -- and for the public. As I understood it, the additional 10 comment period that you're calling for is 11 limited to those new documents that -- that 12 were received, and is not comment about 13 these particular draft changes that -- that 14 15 you have proposed at this point. Is that correct? 16 17 MR. LANGFORD: That is correct. 18 19 The -- many of these proposals are actually 20 in response to the comments we already got. So we're -- we're ask -- making the permit a 21 good bit more strict, the proposed permit a 22 good bit more strict. But yes. So the 23

of time will be, as we stated, on the

24

25

public comment period for the minimum period

1	documents that were not available during the
2	original public comment period.
3	
4	MS. ROVNER: Once I just want to
5	ask about that. I mean, I thought we were
6	asking to have public comment on everything
7	that had been emailed to us. So I guess
8	
9	MR. LANGFORD: So I think there was
10	a particular list of stuff that had
11	
12	MS. MORENO: A list of documents.
13	$-K \sqcup F \sqcup$
14	MR. LANGFORD: of documents.
15	
16	MS. MORENO: We had incorporated
17	into the agency file were the documents that
18	I was referencing in the two emails. Of
19	course, you were the only one that asked for
20	that being the two emails.
21	It's just that was the
22	documents in that email that we had added to
23	the file.
24	
25	MR. LANGFORD: And and you

mentioned Dr. Fjord's --1 2 MS. MORENO: And the one from 3 Dr. Fjord that she sent directly. And the 4 additional letter from SELC about 5 demographics. 6 7 MR. LANGFORD: Yeah, and the 8 9 demographic stuff. 10 MS. MORENO: It was not ever in my 11 mind anything to do with that -- the 12 modified permit. 13 14 MR. LANGFORD: Yeah. 15 Changes included into the permit are pretty much in 16 response to the previous permit -- public 17 comment period. Are there other items that 18 we need to consider? 19 20 MS. ROVNER: I don't know. 21 the one that made the motion. And the 22 motion that I made was the documents that 23 were emailed to us. So if I made a motion 24 that didn't include this, I didn't 25

understand that. 1 2 MS. BERNDT: The motion was 3 actually just to hold the public comment 4 5 period on the vote on Sunday. It was my clarifying question that went to --6 7 LADY IN GALLERY: Can you use a 8 9 microphone? 10 MS. BERNDT: -- the documents that 11 were emailed. 12 13 LADY IN GALLERY: We can't hear 14 15 you. 16 MS. BERNDT: The motion that you 17 made just was to hold a public comment 18 period and then vote on the permit. And the 19 20 clarifying discussions were based on my request and referenced the additional 21 documents that had been emailed. It was 22 never -- the ones that I referenced were the 23

the Department had put into the agency

24

25

ones that were the additional documents that

files. The document that I knew y'all had received directly from Dr. Fjord. And then there was the other email from SCLC that had some additional demographic information.

There was no mention of or inclusion of the modified draft permit that had been sent to y'all. So if that is an intent, that needs another motion.

MR. LANGFORD: The draft permit is much the same as the permit that was already public noticed. Between that, about 80 commenters at the public hearing in Buckingham.

Another 80 or so at the -- at the public hearing. We've had the public comment period for written comments and the extension of that by 10 days.

And there's really nothing in this document that -- that hasn't been already discussed. But the things we added a moment ago were all requested by one commenter or another. So --

MR. GOOCH: Hold on. I can clear

1	that up. The comments were overwhelmingly
2	to reject the pipeline. This is not a
3	response to the comments.
4	
5	MR. LANGFORD: We did there
6	because we looked at the comments. I sat
7	through 16 hours of of personal comments
8	
9	
10	MAN IN GALLERY: Yeah, but you
11	still can't hear us. That's the problem.
12	You still can't hear us.
13	
14	MR. LANGFORD: Sir
15	
16	LADY IN GALLERY: We have updated
17	map showing 34 homes, not four that they put
18	their data on. I've got a map I can give
19	you.
20	
21	MAN IN GALLERY: Dominion failed to
22	
23	
24	MR. LANGFORD: We'll come to order.
25	And please, if you restore order. Those

documents that you just mentioned are 1 included in what we are going to have public 2 3 comment on. So don't get too excited about 4 5 Because that is part of the -- of the new public comment. The only thing we're 6 saying is that the actual language in the 7 draft permit isn't -- at least, it isn't at 8 9 this point. 10 LADY IN GALLERY: Can we ask a 11 question? 12 13 MR. LANGFORD: 14 So 15 MS. BERNDT: So let me make sure I 16 understand. What we're asking for public 17 comment on is the new information that we 18 19 received since the last meeting. 20 MR. LANGFORD: Correct. 21 22 This is not included MS. BERNDT: 23 because this is the same permit that was 24 before us before with some additional 25

provisions. 1 2 MR. LANGFORD: That make it more 3 stringent. 4 5 MS. BERNDT: That make it more 6 7 stringent. 8 MS. ROVNER: I think I can live 9 with that. I was -- okay. Thank you. 10 11 MR. LANGFORD: All right. 12 13 Ms. Moreno. 14 15 MS. MORENO: I had asked Mr. Paylor to speak with the Department of Health to 16 consider whether the Department of Health 17 could respond for a request from the public 18 19 or a health assessment. And I'd like to ask 20 Mr. Paylor to tell us about his discussions on that topic. 21 22 MR. PAYLOR: Thank you, Ms. Moreno. 23 I did discuss options with the epidemiology 24 25 section of the Health Department. They do

have a program that would allow them to do a 1 health assessment that is affiliated with 2 3 ATSDR. And -- and they have -- actually have some future planning to do that. 4 5 And they are -- would be very willing to take that on. It is a program 6 that works at both modeled and monitored 7 data. 8 9 And so it would take place 10 over -- over several years. But they have told me that they would be more than willing 11 to undertake that -- this. 12 13 MS. MORENO: And Mr. Paylor, I 14 15 understand that the data that would be required for the assessment is exactly the 16 17 type of data that is being collected at the site. 18 19 20 MR. PAYLOR: That -- that is 21 correct. 22 MS. MORENO: Thank you. 23 24 MR. LANGFORD: Did you want to 25

request that that be done or waste of time? 1 2 MR. PAYLOR: I will share with the 3 Board for now that we -- that I will 4 5 specifically request that of the Health Department. And I have confidence that 6 7 they're prepared to move forward with that. 8 9 MR. LANGFORD: Okay. Let us know 10 11 MS. MORENO: We also had discussed 12 that if there's any -- anything in writing, 13 any or all that is available now that we 14 15 could share in the permit file, that that would give the public an idea of what it is 16 we're talking about. That we would do that. 17 If that's available, that would be helpful. 18 19 20 MR. PAYLOR: My whole intent is that as well. 21 22 MR. LANGFORD: Thank you. Having 23 -- since we've postponed the vote on the 24 permit -- that won't happen until some time 25

in the future. We've got to do public 1 comment period, a minimum time, on some new 2 3 documents that -- that have been put into the record. 4 And as of that, I think we've 5 come to the end of our meeting. Is there a 6 7 motion to adjourn? One, second only. 8 9 LADY IN GALLERY: Is it going to be 10 the four of you or --11 MR. LANGFORD: Hold on. The 12 question is -- has to do with -- with this 13 health assessment that we just asked to be 14 done, how will that be handled. Mr. Paylor. 15 16 17 MR. PAYLOR: It was my understanding from talking with Ms. Moreno 18 that I would ask the Health Department to 19 20 outline their protocol. And we would make that 21 information available to the Board and to 22 the public. But nothing about the results 23

be available in -- in any near time.

24

25

of that would be anything that -- that would

1	think it's it's reasonable to ask the
2	Health Department to outline their protocol,
3	at least, so that you and the public know
4	what that is.
5	But I don't expect that to be
6	I don't understand that to be a subject
7	of the public comment period.
8	
9	MR. LANGFORD: Yeah. That's what I
10	understood as well.
11	
12	MAN IN GALLERY: How many Board
13	members will vote? How many Board members
14	will hear the new information
15	
16	MR. LANGFORD: Do I hear a motion
17	to adjourn?
18	
19	LADY IN GALLERY: How many Board
20	members will
21	
22	MR. LANGFORD: There's a motion to
23	adjourn. All in favor, say aye.
24	
25	BOARD MEMBERS: Aye.

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MR. LANGFORD: Motion -- meeting is
 1
          adjourned.
2
3
              (The State Air Pollution Control Board
4
5
    meeting concluded at 12:18 p.m.)
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CERTIFICATE OF THE COURT REPORTER 1 2 3 I, Debroah Carter, hereby certify that I was the Court Reporter at the BOARD MEETING of the 4 STATE AIR POLLUTION CONTROL BOARD, heard in Richmond, 5 Virginia, on December 19th, 2018, at the time of the 6 7 Board Meeting herein. I further certify that the foregoing 8 9 transcript is a true and accurate record of the 10 testimony and other incidents of the Board meeting herein. 11 Given under my hand this 30th of December, 12 2018. 13 14 15 16 Debroah Carter, CMRS, CCR 17 Virginia Certified Court Reporter 18 19 My certification expires June 30, 2019. 20 21 22 23 24 25